

CLAIMS

1. A digital broadcasting system for transmitting by a transmitter and for receiving by a receiver a program prepared by arranging a continuous succession of events in the form of a transport stream for terrestrial broadcasting;

said transmitter being adapted to provide said transport stream with link information showing the links between said transport stream, program or events being broadcast in the service area of the transmitter for terrestrial broadcasting and the programs being broadcast in adjacent service areas;

said receiver being adapted to select a program being transmitted in said adjacent service area on the basis of said link information added to the transport stream being transmitted in said service area when moves into one of the adjacent service areas.

2. The system according to claim 1, wherein said transmitter transmits said transport stream by providing it with link information showing the priorities allocated to the respective links along with the links.

3. The system according to claim 1, wherein said transmitter describes said link information by means of the link descriptor of the NIT (network information table), the SDT (service description table), or the EIT (event information table) contained in said transport stream.

4. The system according to claim 3, wherein said transmitter describes the

respective priorities of said links in [linkage_type] or [private_data_byte] of the link descriptor when providing said transport stream with said link information.

5. A digital broadcasting transmitter for transmitting a program prepared by arranging a continuous succession of events in the form of a transport stream for terrestrial broadcasting, said transmitter comprising:

a link information providing means for providing said transport stream with link information showing the links between said transport stream of a program or events being transmitted in the service area of terrestrial broadcasting and the programs being transmitted in adjacent service areas.

6. The transmitter according to claim 5, wherein said link information providing means provides the NIT (network information table) contained in said transport stream with said link information.

7. The transmitter according to claim 5, wherein said link information providing means provides the SDT (service description table) contained in said transport stream with said link information.

8. The transmitter according to claim 5, wherein said link information providing means provides the EIT (event information table) contained in said transport stream with said link information.

9. The transmitter according to claim 5, wherein said link information providing means provides said transport stream with link information showing the priorities allocated to the respective links along with the links.

10. The transmitter according to claim 9, wherein said link information providing means provides said transport stream with the links in the order of priorities when providing it with said link information.

11. The transmitter according to claim 5, wherein said link information providing means describes said link information by means of the link descriptor of the NIT (network information table), the SDT (service description table), or the EIT (event information table) contained in said transport stream.

12. The transmitter according to claim 11, wherein said link information providing means describes the respective priorities of said links in [linkage_type] or [private_data_byte] of the link descriptor when providing said transport stream with said link information.

13. A digital broadcasting receiver for receiving a program prepared by arranging a continuous succession of events in the form of a transport stream for terrestrial broadcasting, said receiver comprising:

a link information extraction means for extracting the link information showing the links between said transport stream, program or events being transmitted in the service area of terrestrial broadcasting and the programs being transmitted in adjacent service areas; and

a program selection means for selecting a program being transmitted in an adjacent service area on the basis of said link information added to the transport stream being transmitted in said service area when said receiver moves into said

adjacent service area.

14. The receiver according to claim 13, further comprising:

a receiving location detection means for detecting the location of receiving said terrestrial broadcast;

said program selection means being adapted to select a program to be received by it on the basis of the location of the receiver detected by said receiving location detection means.

15. The receiver according to claim 14, wherein said receiving location detection means detects the location of receiving said terrestrial broadcast on the basis of the signal transmitted from a GPS (global positioning system).

16. The receiver according to claim 14, wherein said receiving location detection means is adapted to operate for receiving location information indicating the location of receiving said terrestrial broadcast as input and determine said location of receiving said terrestrial broadcast on the basis of the input location information.

17. The receiver according to claim 13, wherein it comprises at least a pair of receiving means for receiving said terrestrial broadcast, one of said receiving means searches a program being transmitted in an adjacent service area by means of said program selection means while the other receiving means keeps on receiving the program of the original service area.

18. The receiver according to claim 13, wherein said link information shows the priorities of the respective links along with said links; and

said program selection means is adapted to sequentially search the programs of the links shown in the link information in the order of said priorities.

19. A digital broadcasting receiver for receiving a program prepared by arranging a continuous succession of events in the form of transport stream for terrestrial broadcasting, said receiver comprising:

a link information extraction means for extracting the link information showing the links between said transport stream, program or events being transmitted in the service area of terrestrial broadcasting and the programs being transmitted in adjacent service areas; and

a program selection means for giving priorities to the links by referring to said link information and selecting a program being transmitted in an adjacent service area on the basis of said priorities when said receiver moves from the service area into said adjacent service area.

20. The receiver according to claim 19, wherein said program selection means determines the priorities to be given to said links according to the history of moving among different service areas in the past.

21. The receiver according to claim 19, wherein said program selection means determines the priorities to be given to said links according to the priorities allocated to the respective service areas in advance.

22. The receiver according to claim 19, wherein said program selection means determines the priorities to be given to said links according to the number of

links of each service area by referring to said link information.

23. A digital broadcasting method for transmitting a transport stream as terrestrial digital broadcasting, the transport stream containing a program prepared by arranging a continuous succession of events, said method comprising:

generating a transport stream provided with a link descriptor describing information on adjacent service areas adapted to replace said transport stream, program or events being broadcast in the service area; and

transmitting said transport stream provided with said link descriptor.